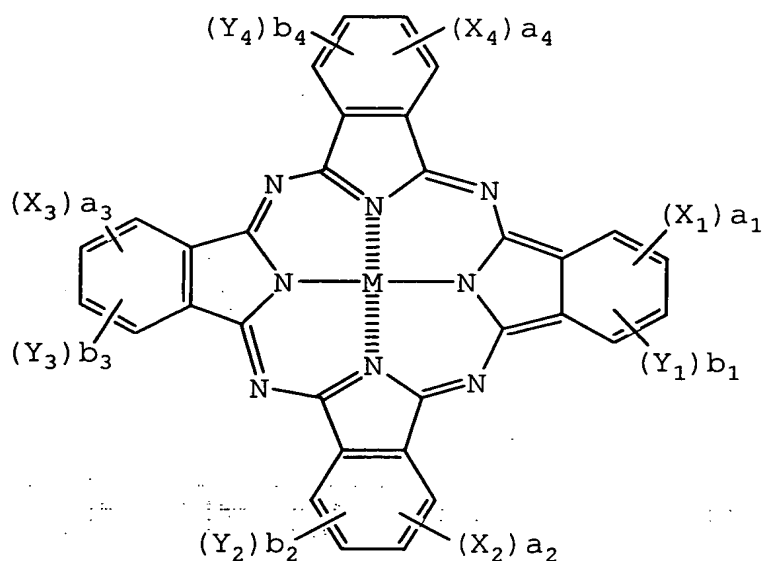


CLAIMS

[1] An ink composition comprising at least water, a cyan dye represented by formula (I) shown below, and an aromatic compound having a carboxyl group and/or a salt thereof:

Formula (I):

[Chem. 1]



(wherein X_1 , X_2 , X_3 and X_4 each independently represents either $-SO-Z$ or $-SO_2-Z$, wherein each Z independently represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group;

Y_1 , Y_2 , Y_3 and Y_4 each independently represents a hydrogen atom, a halogen atom, an alkyl group, a cycloalkyl group, an alkenyl group, an aralkyl group, an aryl group, a heterocyclic group, a cyano group, a hydroxy group, a nitro group, an amino group, an alkylamino group, an alkoxy group, an aryloxy group, an amido group, an arylamino group, a ureido group, a sulfamoylamino group, an alkylthio group, an arylthio group, an alkoxycarbonylamino group, a sulfonamido group, a carbamoyl group, an alkoxycarbonyl group, a heterocyclic oxy group, an azo group, an acyloxy group, a carbamoyloxy group, a silyloxy group, an aryloxycarbonyl group, an aryloxycarbonylamino group, an imido group, a heterocyclic thio group, a phosphoryl group, an acyl group or an ionic hydrophilic group, and each group may further have a substituent;

a_1 to a_4 and b_1 to b_4 each represents the number of substituents X_1 to X_4 and to Y_4 , a_1 to a_4 each independently represents an integer of 0 to 4, provided that a_1 to a_4 all are not 0 at the same time, and b_1 to b_4 each independently represents an integer of 0 to 4; and

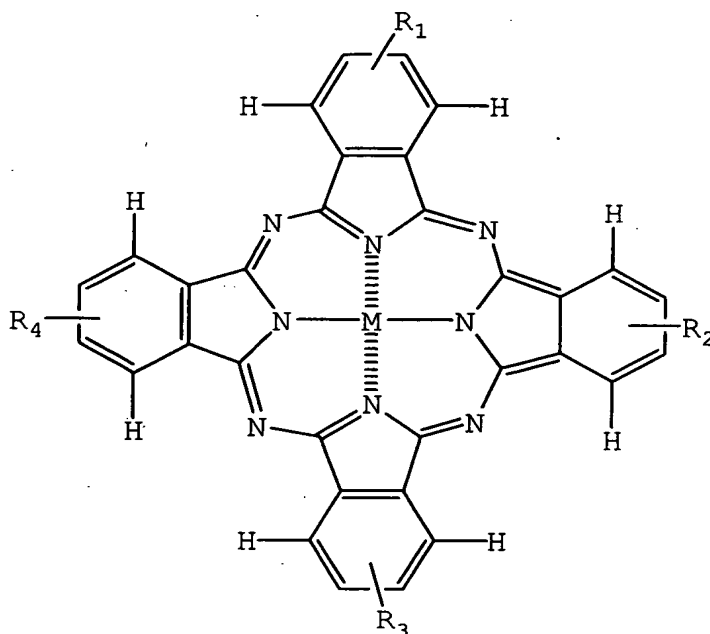
M represents a hydrogen atom, a metal element or an oxide, hydroxide or halide thereof;

provided that at least one of X_1 , X_2 , X_3 , X_4 , Y_1 , Y_2 , Y_3 and Y_4 is an ionic hydrophilic group or a group having an ionic hydrophilic group as a substituent).

[2] The ink composition as claimed in claim 1, wherein the cyan dye represented by formula (I) is represented by the following formula (II):

Formula (II):

[Chem. 2]



(wherein M has the same meaning as in formula (I), R_1 to R_4 each independently represents $-SO_2Z$, and Z has the same meaning as in formula (I), provided that at least one of four Z's has an ionic hydrophilic group as a substituent).

[3] The ink composition as claimed in claim 2, wherein said cyan dye is a cyan dye of formula (II) where M is a copper element and Z having an ionic hydrophilic group is a sulfoalkyl group.

[4] The ink composition as claimed in claim 3, wherein the counter cation of said sulfoalkyl group is a lithium cation.

[5] The ink composition as claimed in any one of claims 1 to 4, wherein said aromatic compound having a carboxyl group and/or a salt thereof is an aromatic compound having one carboxyl group and/or a salt thereof.

[6] The ink composition as claimed in any one of claims 1 to 5, wherein said aromatic compound having a carboxyl group and/or a salt thereof is a compound having a naphthalene skeleton and/or a salt thereof.

[7] The ink composition as claimed in claim 6, wherein said compound having a naphthalene skeleton and/or a salt thereof is a compound having a carboxyl group and an -OR group (wherein R is a hydrogen atom or an alkyl group having a carbon number of 1 to 6) on the naphthalene skeleton.

[8] The ink composition as claimed in claim 7, wherein said compound having a naphthalene skeleton and/or a salt thereof is a compound having one carboxyl group and one -OR group (wherein R is a hydrogen atom or an alkyl group having a carbon number of 1 to 6) on the naphthalene skeleton.

[9] The ink composition as claimed in any one of claims 6 to 8, wherein said compound having a naphthalene

skeleton and/or a salt thereof is a compound having a carboxyl group at its 2-position and/or a salt thereof.

[10] The ink composition as claimed in claim 9, wherein said compound having a carboxyl group at its 2-position and having a naphthalene skeleton and/or a salt thereof is at least one member selected from a 1-hydroxy-2-naphthoic acid, a 2-naphthoic acid, a 3-hydroxy-2-naphthoic acid, a 6-hydroxy-2-naphthoic acid, a 3-methoxy-2-naphthoic acid, a 6-methoxy-2-naphthoic acid, a 6-ethoxy-2-naphthoic acid, a 6-propoxy-2-naphthoic acid, and a salt thereof.

[11] The ink composition as claimed in any one of claims 1 to 10, wherein said salt is a lithium salt.

[12] The ink composition as claimed in any one of claims 1 to 11, which comprises said aromatic compound having a carboxyl group and/or a salt thereof in an amount of 0.1 to 10 wt% based on the entire amount of the ink composition.

[13] The ink composition as claimed in any one of claims 1 to 11, wherein the content ratio of said cyan dye and said aromatic compound having a carboxyl group and/or a salt thereof is from 1:0.1 to 1:10 in terms of the weight ratio.

[14] The ink composition as claimed in any one of claims 1 to 13, which further comprises a nonionic surfactant.

[15] The ink composition as claimed in claim 14, wherein said nonionic surfactant is an acetylene glycol-based surfactant.

[16] The ink composition as claimed in claim 14 or 15, which comprises said nonionic surfactant in an amount of 0.1 to 5 wt% based on the entire amount of the ink composition.

[17] The ink composition as claimed in any one of claims 1 to 16, which further comprises a penetration accelerator.

[18] The ink composition as claimed in claim 17, wherein said penetration accelerator is a glycol ether.

[19] The ink composition as claimed in any one of claims 1 to 18, wherein the pH of the ink composition at 20°C is from 8.0 to 10.5.

[20] The ink composition as claimed in any one of claims 1 to 19, which is used in an inkjet recording method.

[21] The ink composition as claimed in claim 20, wherein said inkjet recording method is a recording method using an inkjet head which forms an ink droplet by mechanical deformation of an electrostrictive element.

[22] An inkjet recording method comprising ejecting a liquid droplet of an ink composition, and attaching said liquid droplet onto a recording medium, thereby performing

the recording, wherein the ink composition used is the ink composition claimed in any one of claims 1 to 21.

[23] Recorded matter which is recorded by using the ink composition claimed in any one of claims 1 to 21 or recorded by the recording method claimed in claim 22.